

IN THE CLAIMS:

1. An isolated polynucleotide comprising,

a polynucleotide sequence set forth in SEQ ID NO 1, or which codes for an amino acid sequence set forth in SEQ ID NO 2, or complements thereto.

- 2. (currently canceled)
- 3. An isolated polynucleotide consisting of:

a polynucleotide sequence for amino acid positions 1-23, 24-538, 539-833, and 834-1036, as set forth in SEQ ID NO 2, or complements thereto.

4. An isolated polynucleotide consisting of:

a polynucleotide sequence which is specific for KSE132 and which is selected from the nucleotide sequences coding for amino acids 1-23, 24-538, and 834-1036 as set forth in SEQ ID NO 2, or complements thereto.

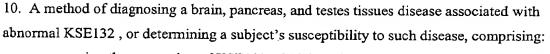
- 5. An isolated polynucleotide of claim 4, wherein said fragment is effective in a polymerase chain reaction.
- 6. An isolated polypeptide comprising,

the amino acid sequence set forth in SEQ ID NO 2, or, amino acids 1-23, 24-538, or 834-1036 as set forth in SEQ ID NO 2,

7. An isolated polypeptide,

selected from the amino acid sequence of amino acids 1-23, 24-538, or 834-1036 as set forth in SEQ ID NO 2 and which is specific-for KSE132.

- 8. (currently canceled)
- 9. A method of claim 8, wherein said agent is an antibody or an antisense which is effective to inhibit translation of said gene.



assessing the expression of KSE132 of Claim 1 in a tissue sample comprising brain, pancreas, and testes tissues cells.

11. A method of claim 10, wherein assessing is:

measuring expression levels of said gene, determining the genomic structure of said gene, determining the mRNA structure of transcripts from said gene, or measuring the expression levels of polypeptide coded for by said gene.

- 12. A method of claim 10, further comprising: comparing said expression to the expression of said gene of a known normal tissue.
- 13. A method of claim 10, wherein said assessing detecting is performed by:

Northern blot analysis, polymerase chain reaction (PCR), reverse transcriptase PCR, RACE PCR, or *in situ* hybridization, and

using a polynucleotide probe having a sequence selected from SEQ ID NO 1, or complements thereto.

14. A method of assessing a therapeutic or preventative intervention in a subject having a brain, pancreas, and testes tissues disease, comprising,

determining the expression levels of KSE132 of Claim 1 in a tissue sample comprising brain, pancreas, and testes tissues cells, or cells derived from brain, pancreas, and testes tissues.

15. A method for identifying an agent that modulates the expression of KSE132 in brain, pancreas, and testes tissues cells, cells derived from brain, pancreas, and testes tissues, or brain, pancreas, and testes tissues progenitor cells, comprising,

contacting a cell population with a test agent under conditions effective for said test agent to modulate the expression of KSE132 of Claim 1in brain, pancreas, and testes tissues cells, and

determining whether said test agent modulates said KSE132.

16. A method of detecting polymorphisms in KSE132 comprising:

comparing the structure of: genomic DNA comprising all or part of KSE132 of Claim 1, mRNA comprising all or part of KSE132, cDNA comprising all or part of KSE132, or a polypeptide comprising all or part of KSE132, with the structure of KSE132 set forth in SEQ ID NO 1.

- 17. A non-human, transgenic mammal whose genome comprises a functional disruption of KSE132 of Claim 1.
- 18. A mammalian cell whose genome comprises a functional disruption of KSE132 of Claim 1.
- 19. A mammalian cell of claim 18, wherein said cell is a brain, pancreas, or testis cell, a cell derived from brain, pancreas, or testis tissues, or a brain, pancreas, and testes tissues progenitor cell.
- 20. A method of advertising KSE132 for sale, commercial use, or licensing, comprising, displaying in a computer-readable medium a polynucleotide set forth in SEQ ID NO 1 AND 2, effective specific fragments thereof, or complements thereto.
- 21. (currently canceled)



22. (new) A method of determining the presence in pancreas cells of a polypeptide coded for by KSE132, comprising

contacting a sample comprising pancreas cells with an antibody which is specific for a polypeptide coded for by KSE132 having the amino acid sequence set forth in SEQ ID NO 2 under conditions effective for said antibody to specifically bind to said polypeptide, and

detecting the binding of said antibody to said polypeptide, whereby the presence in pancreas cells of said polypeptide is determined.

23. (new) A method of claim 22, wherein said detecting is performed by immunofluorescence, Western blot, radioimmunoassay, enzyme-linked-immunoabsorbent assay, or enzyme immunoassay.

All

24. (new) A method of claim 22, wherein said antibody is specific for amino acids 1-23, 24-538, or 834-1036 of SEQ ID NO 2.

-5-

16U 102 R1